UK Patent Application (19) GB (11) 2 196 840(13) A

(43) Application published 11 May 1988

- (21) Application No 8626442
- (22) Date of filing 5 Nov 1986
- (71) Applicant Fairform Mfg Co Ltd

(Incorporated in Hong Kong)

1st and 5th Floors, Wing Kwong Factory Building, 1-3 Sheung Hei Street, San Po Kong, Kowloon, Hong Kong

- (72) Inventor Hing Wah Huen
- (74) Agent and/or Address for Service Marks & Clerk, 57-60 Lincoln's Inn Fields, London WC2A 3LS

- (51) INT CL4 E03C 1/06
- (52) Domestic classification (Edition J): **A4N 2B**
- (56) Documents cited None
- (58) Field of search A4N A4B Selected US specifications from IPC sub-classes A47K

(54) Riser rail assembly for a shower fitting

(57) A riser rail assembly for a shower fitting comprises a rail 10 having a slider 11 which is arranged to detachably receive a shower head. The rail 10 is of I-shaped crosssection with T-shaped formations 18 projecting from a rear wall 12. The slider 11 is of C-shape with projections 26 arranged to cooperate with the T-shaped formations 18 to hold the slider in position.

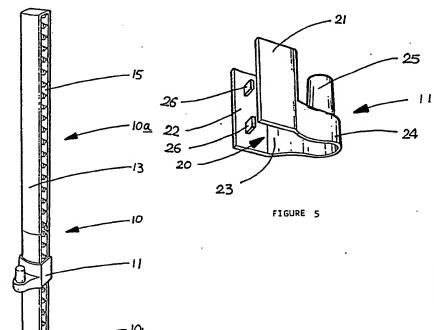


FIGURE 1

1/3

2196840

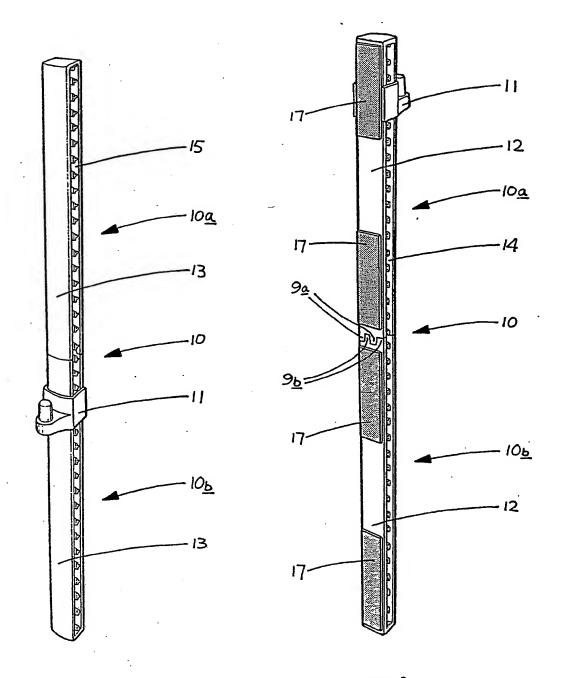


FIGURE 1

FIGURE 2

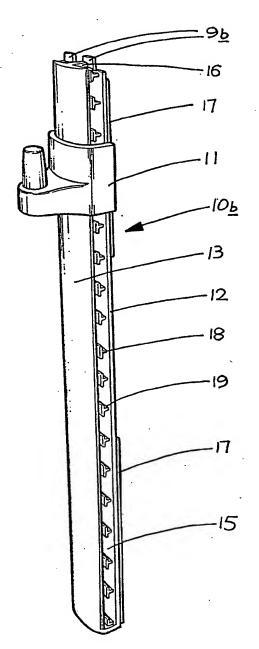
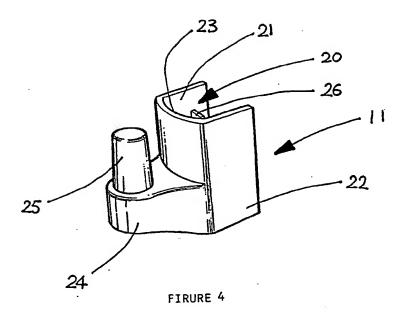


FIGURE 3



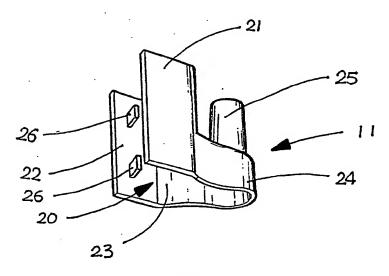


FIGURE 5

SPECIFICATION

Riser rail assembly for a shower fitting

5 This invention relates to a riser rail assembly for a shower fitting.

Riser rail assemblies are normally fixed to a bathroom wall and support the handset of a shower fitting in such a manner as to allow 10 the height of the handset to be adjusted. Riser rail assembles are known which comprise a rail in use fixed to a wall with its longitudinal axis vertical and a slider mounted on the rail and adapted to detachably support a handset. 15 These known riser rail assemblies utilise frictional forces to hold the slider in a selected position along the longitudinal extent of the rail.

According to the present invention there is provided a riser rail assembly comprising a riser rail and a slider mounted on the rail for slidable movement therealong, the slider being arranged to detachably support a handset of a shower fitting and the rail having a plurality of longitudinally spaced apart formations selectively co-operable with one or more complementary formations on the slider to allow the slider to be positively located at any one of a plurality of discrete positions along the length of the rail.

Preferred and/or optional features of the invention are set forth in claims 2 to 8.

It is thus possible to make a riser rail assembly for a shower fitting, which is inexpen-35 sive to manufacture and which will support the handset in a reliable and height adjustable manner.

The invention will now be more particularly described, by way of example, with reference to the accompanying drawings, in which:-

Figure 1 is a perspective view from the front and one side of one embodiment of a riser rail assembly according to the present invention,

45 Figure 2 is a perspective view from the rear and other side of the riser rail assembly of Figure 1 with the slider in an alternative position, and

Figure 3 is a perspective view from the 50 front and one side of part of the riser rail assembly of Figure 1.

Figures 4 and 5 are different perspective views of the slider.

Referring to the drawings, the riser rail assembly shown therein comprises a riser rail 10 and a slider 11, both of plastics material. The riser rail 10 is formed of two identical parts 10a and 10b which fit together end on with projections 9a at the end of one part 10a co-operating with projections 9b at the end of the other part.

The rail 10 is of I-shaped cross-section and has a rear wall 12, a front wall 13 having an arcuate front facing surface, and longitudinally extending grooves 14 and 15 on opposite

sides of the rail, separated by a web 16.

The rear wall 12 has four (two on each part of the rail 10) pads 17 of double sided adhesive tape thereon for securing the rail to a vertical support surface, such as a bathroom wall.

Within each groove 14, 15, the rail has a plurality of longitudinally spaced formations 18. These formations 18 are of T-shaped cross-section and are integral with the rear wall 12 and the web 16. The formations 18 are arranged in pairs, one in groove 14 and aligned horizontally with another in groove 15, and each formation defines a trough 19 for a purpose which will become apparent hereinafter.

The slider 11 is mounted on the rail 10 for slidable movement therealong. The slider 11 comprises a channel-shaped portion 20, having side walls 21 and 22 joined by an arcuate web 23, a tongue 24 projecting forwardly from the web 23 and a shower head support in the form of a peg 25 upstanding from the tongue 24.

Two formations in the form of lugs 26 project inwardly from each side wall 21, 22 to co-operate with two vertically spaced pairs of formations 18 in the rail 10 when located in the troughs 19 thereof to positively locate the slider 11 with respect to the rail 10.

The slider 11 can be located in anyone of a plurality of discrete positions along the rail 10, as defined by the formations 18, so that the height of the slider 11 and hence of a shower handset supported thereby can be adjusted by a user. This is achieved simply by moving the slider 11 upwards to release the lugs 26 from respective formations 18, pulling the slider 11 forwards to allow the lugs 26 to ride in the grooves 14 and 15, and then subsequently locating the lugs 26 in the troughs 19 of other formations 18 at a required position along the rail 10.

It will be appreciated that the slider 11 is
110 held captive with respect to the rail against
removal therefrom in a direction transverse to
the longitudinal extent of the rail. In the embodiment shown, the grooves 14 and 15 are
closed at opposite ends to also prevent re115 moval of the slider 11 therefrom in a longitudinal direction.

The embodiment described above is given by way of example only and many modifications will be apparent to persons skilled in the art without departing from the scope of the invention defined by the appended claims. For example, the rail could be of C-shaped cross-section and the slider of I-shaped cross-section with complementary formstions in the channel of the rail and on the slider. Also the

rail could be formed as a single part, preferably open at one end to allow insertion of the slider, additional, middle, sections of rail could be provided, the middle sections having for-

130 mations 9a, 9b at each end.

BNSDOCID: <GB_____2196840A_I_>

CLAIMS

1. A riser rail assembly for a shower fitting, comprising a riser rail and a slider mounted on 5 the rail for slidable movement therealong, the slider being arranged to detachably support a handset of a shower fitting and the rail having a plurality of longitudinally spaced apart formations selectively co-operable with one or more 10 complementary formations on the slider to allow the slider to be positively located at any one of a plurality of discrete positions along the length of the rail.

2. The riser rail assembly of claim 1, 15 wherein the formations on the rail are arranged in pairs, the formations of each pair being aligned transversely of the longitudinal extent of the rail, and wherein the slider has at least two complementary formations.

20 3. The riser rail assembly of claim 2, wherein the slider has four of said complementary formations respectively co-operable with two longitudinally spaced pairs of formations on the rail.

4. The riser rail assembly of anyone of the preceding claims, wherein the formations on the rail define troughs which receive the formation(s) on the slider.

5. The riser rail assembly of anyone of the 30 preceding claims, wherein the slider is held captive with respect to the rail against removal therefrom in a direction transverse to

the longitudinal extent of the rail.

6. The riser rail assembly of claim 5, 35 wherein the rail is of generally I-shaped crosssection defining grooves along opposed sides, and the slider has a channel-shaped portion, mounted on the rail, with side walls thereof extending across the open ends of the 40 grooves, the formations on the rail being in aligned pairs, one in each groove, and the slider having at least two formations connected to the inner surfaces of the two side

walls, respectively.

7. The riser rail assembly of anyone of the 45 preceding claims, wherein the rail and slider are of plastics material.

8. The riser rail assembly of anyone of the

preceding claims, wherein the rail is provided 50 with one or more double-sided adhesive pads for securing the rail to a vertical support surface.

9. The riser rail assembly of anyone of the preceding claims, wherein the rail is formed in 55 two parts mountable in end on relationship.

10. A riser rail assembly for a shower fitting, substantially as hereinbefore described with reference to the accompanying drawings.

Published 1988 at The Patent Office, State House, 66/71 High Holborn, London WC1R 4TP Further copies may be obtained from The Patent Office, Sales Branch, St Mary Cray, Orpington, Kent BR5 3RD. Printed by Burgess & Son (Abingdon) Ltd. Con. 1/87.